

REMARKS

Claims 124-130 and 143-149 are pending in the application. Claim 128 is amended by adding the method steps "comprising irradiating the UHMWPE to form free radicals in the UHMWPE; melting the UHMWPE; and allowing the UHMWPE to cool." Claims 147 is amended for clarity. No new matter has been added. The office action is discussed below.

Withdrawal of Finality of Office Action:

Applicants thank the examiner for withdrawal of the finality of Office Action mailed 07/06/2005.

Applicants also thank the examiner for withdrawal of anticipation rejection and admission that Saum *et al.* (U.S. Patent No. 6,017,975) is not a prior art under 35 USC 102(a).

Claim Rejections - 35 U.S.C. § 112:

On pages 4-5 of the office action, the examiner rejected claims 124-130 and 143-149 and alleged as being indefinite. Applicants traverse this rejection on the grounds that the examiner has not provided reasons why the skilled person would not understand the claims. Claim 128 is amended by adding the process steps "comprising irradiating the UHMWPE to form free radicals in the UHMWPE; melting the UHMWPE; and allowing the UHMWPE to cool." Withdrawal of the rejection is requested.

Claim Rejections - 35 U.S.C. § 102:

On page 5 of the office action, the examiner rejected claims 124-130 and 143-149, and alleged as being anticipated by Shen *et al.* (6,228,900, which claims priority to a provisional application serial no. 60/017,852, filed July 9, 1996).

Applicants respectfully traverse the rejection and indicate that the instant application claims priority to U.S. Serial No. 08/726,313 (filed October 2, 1996), which was filed as a continuation-in-part of U. S. Serial No. 08/600,744 (filed February 13, 1996). Therefore, the Shen patent does not qualify as prior art under 35 USC § 102(e)

because applicant's initial filing antedates Shen's filing dates. In addition, applicants point out that the examiner has not analyzed the provisional application (serial no. 60/017,852, filed July 9, 1996). Only the subject matter in the provisional application that is carried on into the issued patent is entitled to the July 9, 1996 date (see MPEP 2127 at 2100-70 to 2100-71, Rev. 3, August 2005). Withdrawal is therefore solicited.

On page 6 of the office action, the examiner rejected claims 126-129 and 143-149, and alleged as being anticipated by Hyon *et al.* (6,168,626, claiming a priority date of May 6, 1996). Applicants respectfully traverse the rejection and refer to the discussion above that applicant's initial filing antedates Hyon's filing dates. Hyon *et al.* is not a prior art to instant application, thus the rejection is improper. Withdrawal is therefore solicited.

On page 6 of the office action, the examiner rejected claims 126-129 and 143-149, and alleged as being anticipated by Salovey *et al.* (6,281,264, claiming a priority date of January 20, 1995).

The Examiner states that Salovey discloses "a method for crosslinking UHMWPE for forming *in vivo* implants. The method comprises irradiating crosslinking of a molten polymer." Applicants respectfully disagree with the examiner. Without acquiescing in the rejections, applicants herewith submit that the conception and reduction to practice of the inventions that relate to crosslinking polyethylene, including UHMWPE, by irradiation of the polymer in a molten state for improving the wear characteristics of polymeric material were achieved prior to January 20, 1995, which is the earliest listed filing date of U. S. patent No. 6,281,264. Applicants refer to a rule 131 declaration (pursuant to 37 CFR § 1.131) filed in a related application (10/197,263). Therefore, Salovey *et al.* is not a prior art to instant application.

Moreover, as admitted by the examiner that Salovey differs by "the order of irradiation and melting." The examiner has not addressed the significance of this determination in view of the pending claims.

Salovey process differs substantially from the instant process as noted above. Therefore, withdrawal of the anticipation rejections is solicited.

On page 6 of the office action, the examiner rejected claims 126-129 and 147-149, and alleged as being anticipated by Shalaby *et al.* (5,824,411). The Examiner specifically states that Shalaby discloses "a method that comprises melting UHMWPE [...] and irradiating the resulting composite with high energy radiation to sterilize and crosslink composites of the UHMWPE." The Applicants point out that according to Shalaby, "composites should be removed from the mold when mold temperature has dropped to below 70°C.," (see col 5 lines 65-67) and then "sterilized [] by radiation" (see col 6 lines 1-5). Thus, Shalaby does not teach heating of irradiated composites.

Therefore, the Examiner has failed to demonstrate that each and every claim term is contained in a single prior art reference. Applicants respectfully request the withdrawal of the rejections.

On page 10 of the office action, the examiner also has cited Sun *et al.* (5,414,049, filed June 1, 1993) as an art of interest. In this regard, applicants point out that Sun uses low dose irradiation for sterilization of finished or packaged products and do not employ irradiation and melting for cross-linking.

Double Patenting Rejections:

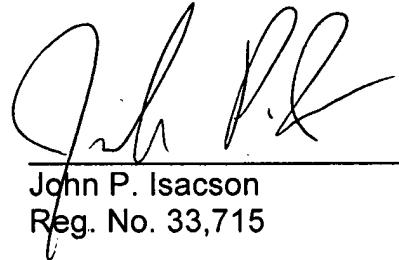
On pages 7-9 of the office action, the examiner has provisionally rejected claims under the judicially created doctrine of obviousness-type double patenting and alleged as being directed to the same invention as the claims of co-pending application serial nos. 10/948,440, 10/197,209, 10/696,362, 10/901,089, and 10/197,263.

Because a notice of allowance for the 10/948,440, 10/197,209, 10/696,362, 10/901,089, or 10/197,263 applications has not been received, the merits of this provisional rejection need not be discussed with the examiner at this time. See MPEP § 822.01.

REQUEST

Applicants submit that the claims are in condition for allowance, and respectfully request favorable consideration to that effect so that an interference can be declared with applicants as the senior party by virtue of the priority afforded by the priority applications. The examiner is invited to contact the undersigned at (202) 912-2000 should there be any questions.

Respectfully submitted,



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Date

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